# *Level 4 Certificate in Sports Massage Therapy – 601/4648/5*

**Scope of Qualification (Practice)**

At level 4 a Sports massage therapist's role includes, planning, providing and evaluating sport massage treatments. Treatments in context; sports massage can be carried out for pre, post, inter, maintenance, restorative **and** corrective purposes (focus on muscle and paratendon pathologies), using a range of basic and advanced massage techniques.

Scope of practice includes working on dysfunctional tissue and on recent non acute injuries or with pre-existing conditions.

**Prerequisites**

Learners wishing to embark on the Level 4 Certificate in Sports Massage Therapy must hold a Level 3 Certificate/Diploma in Sports Massage Therapy , or equivalent.

**Qualification Structure**

Learners must complete all three mandatory units (19 credits).

| | Title | Unit Reference Number | Level | Credits | GLH |
|---|---|---|---|---|---|
| 1. | Conducting Subjective and Objective Assessment | D/506/7501 | 4 | 7 | 50 |
| 2. | Treatment Modalities to Support Soft Tissue Repair | K/506/7503 | 4 | 3 | 20 |
| 3. | Provide Sports Massage Techniques to Prevent and Manage Injury | H/506/7502 | 4 | 9 | 58 |

# *Additional Guidance*

**Conducting Subjective and Objective Assessment – D/506/7501**

**Observations:**

- Objective testing must be carried out on a **minimum of five clients** to cover **all major joints of the body**. See 'Be able to conduct subjective and objective assessment'.

**Understand the anatomy and physiology of the major joints of the body**

Anatomy and Physiology of the major joints of the body (bony and soft structures, joint end feel)

- *Ankle and foot*
  - Joint line – talocural
  - Landmarks – medial/lateral malleolus, peroneal tubercle, navicular tuberosity, talar dome, tarsal, metatarsal, phalanges
  - Soft Tissue – talofibular ligaments, calcaneofibular ligament, Achilles tendon, deltoid ligament, plantar fascia, inter capsule, intra capsule, inter synovial, intra synovial, bursa – Achilles (superficial and deep), interosseous membrane, retinaculum (superior/inferior extensor, lateral and posterior)

- *Knee*
  - Joint line – tibial plateau
  - Landmarks – superior pole of patella, inferior pole of patella, lateral and medial femoral condyle, tibial tuberosity, lateral and medial femoral epicondyle, head of fibula, pes anserine
  - Soft issue – lateral collateral ligament, medial collateral ligament, patellar tendon, medial and lateral meniscus, bursa (popliteal, pre-patella, supra-patella, superficial and deep infra-patella, pes anserine)

- *Hip*
  - Joint line – femoroacetabular, sacroiliac
  - Landmarks – iliac crest, anterior superior iliac spine, anterior inferior iliac spine, posterior superior iliac spine, ischial tuberosity, pubic tubercles, greater trochanter
  - Soft tissue – bursa (superficial and deep trochanteric, ischial), ligaments (ischiofemoral, iliofemoral, pubofemoral, head of femur, transverse ligament), labrum, sciatic nerve, femoral nerve

- *Shoulder*
    - Joint line – glenohumeral, acromioclavicular, sternoclavicular
    - Landmarks – acromion process, coracoid process, greater tubercle, lesser tubercle, lateral/ medial border of scapula, inferior/ superior angle of scapula, spine of scapula
    - Soft tissue – acromioclavicular ligaments, coracoclavicular ligament, coracoacromial ligament, sternoclavicular ligaments, glenohumeral ligaments, costoclavicular ligament, interclavicular ligament, bursa (subdeltoid, subacromion), bicep tendon, labrum, brachial plexus (pathway)

- *Elbow*
    - Joint line – radioulnar, humeroulnar, humeroradial
    - Bony landmarks – lateral and medial epicondyle, head of radius, olecranon process
    - Soft tissue – lateral and medial collateral ligaments, annular ligament, bursa (olecranon), interosseous membrane

- *Wrist/hand*
    - Joint lines – radiocarpal, ulnocarpal
    - Bony landmarks – radial and ulnar styloid processes, carpals, metacarpals, phalanges
    - Soft tissue – radial/ulnar collateral ligaments, radiocarpal/ ulnocarpal ligaments, interosseous membrane, carpal tunnel, tunnel of Guyon, ulnar nerve, medial nerve, radial nerve, retinaculum (flexor)

- *Spine/head*
    - Joint line – sacroiliac joint
    - Spinous process of C7, T3, T7, L4, sacrum, occipital process, mastoid process
    - Soft tissue – ligaments (supraspinous, interspinous, inter-transverse, anterior longitudinal, posterior longitudinal, ligamentum flavum, ligamentum nuchae, sub occipital, sacrospinous, sacrotuberous, iliolumbar, sciatic nerve, sacral/lumbar plexus (knowledge of)

- *Joint end feel*
    - Bone on bone
    - Muscle spasm
    - Capsular
    - Spongy block
    - Tissue approximation
    - Empty

**Understand the influences and effects of client information on treatment planning**

- Predisposing factors to injury and dysfunction
- Lifestyle, age, diet, previous injury, levels of activity, sport, stress, rest, gender, body composition, anatomy

- *Deferral*
    - Acute inflammation, referral of treatment, contra-indications/contra-actions

- *Referral*
    - Fractures / breaks, haematomas, ruptures, dislocations, anything that is not soft tissue damage, treatment is not working or results are unpredictable, contra-indications/contra-actions, outside of scope of practice

**Understand the effects of anatomy, physiology and pathology on human function**

- *Common postural types*
    - Centre of gravity (lateral)
    - Upper and lower cross syndrome
    - Scoliosis
    - Hyper and hypo lordosis
    - Hyper and hypo kyphosis
    - Sway Back
    - Neutral spine
    - Military
    - Slumped
    - Flat back
    - Dowagers hump
    - Posterior, anterior, lateral pelvic tilt and rotations
    - Sports specific postures

- *Effects of postural deviations*
    - Compensatory somatic patterns
    - Physiological effects
    - Psychological effects
    - Effects on performance (negative/positive)
    - Increased susceptibility to injury

- *Pathophysiology of common injuries/soft tissue dysfunction*
    - Muscle strains

- Spasms
- Cramps
- Tendinopathy/tenosynovitis
- Compartment syndrome (most common leg or forearm)
- Inter/Intra muscular haematoma
- Common signs, symptoms for different musculo-skeletal/soft tissue dysfunction

- *Pathophysiology of ankle/foot*
  - Achilles rupture, fibular fracture, anterior capsule, calcaneal bursitis, plantar fasciitis, ATFL sprain
- *Pathophysiology of leg*
  - Shin splints, tibial stress fracture
- *Pathophysiology of knee*
  - Effusion, runners knee, pes anserine bursitis, Osgood Schlatters disease, patella bursitis (pre, supra, infra), imbalance VMO and vastus lateralis, jumpers knee (patella tendinopathy)
- *Pathophysiology of hip*
  - Hip stability, gluteus medius weakness, hip flexor tightness/contracture, rectus femoris tightness, leg length (true and apparent), ITB length, piriformis syndrome, trochanteric bursitis, myositis ossificans
- *Pathophysiology of shoulder*
  - Rotator cuff (impingement, tendinitis, strain), subacromial bursitis/impingement, subacromial impingement, supraspinatus strain, long thoracic nerve damage, weak serratus anterior/mid trapezius, scapula winging), bicep tendon tendonitis, biceps tendonitis, clavicle fracture
- *Pathophysiology of elbow*
  - Medial epicondylitis, lateral epicondylitis, ulnar nerve test, median nerve test, olecranon bursitis
- *Pathophysiology of wrist and hand*
  - Fractures, radial and ulnar arteries, scaphoid fracture, navicular fracture, carpel tunnel syndrome, flexor tenosynovitis, flexor tendon avulsion, extensor tendon avulsion, De Quervain's disease, median, ulnar or radial nerve
- *Pathophysiology of back and neck*
  - Sciatica check (lumbar or piriformis syndrome), vertebral fracture, herniated disc, facet joint lock, facet joint syndrome, pain cord compression, spinal cord or nerve root damage, rib fracture

**Understand the principles and practice of objective assessment techniques**

***Objective assessment:***

- Ankle, knee, hip, shoulder, elbow, wrist, spine-active only
- Major muscle groups
- Upper and lower cross syndromes
- Sports specific postures
- *Range of objective assessment techniques:*
    - Asymmetry
    - Palpation
    - Postural analysis
    - Active
    - Passive
    - Resisted

- *Range of movement:*
    - Active
    - Passive
    - Resisted

- *Functional tests:*
    - Sit to stand
    - Walking
    - Squat
    - Lunge

***Special tests:***

All special tests are for the purpose of identifying musculoskeletal length, injury or imbalance and to rule out fractures**.** Muscle length and strength of major muscles where appropriate e.g. hamstrings, pectorals, gastrocnemius

- Ankle
    - Bump test (percussion test), Thompson squeeze or Flipper Test, calf length test
- Knee
    - Patella tap, sweep (effusion), patella mal tracking (lateral pull test), modified Ober's test, Noble's test
- Hip
    - Trendelenburg, Thomas Test, Kendall Test, leg length (true and apparent), modified Ober's Test, piriformis length test

- Shoulder
    - Arm drop test, painful arc test, empty can test, Apley's scratch test, Speed's test, active impingement test (Neer's test), impingement relief test, Gerber's lift off sign, Hawkins Kennedy test
- Elbow
    - Mill's test, Cozen's sign, passive test (medial epicondylitis)
- Wrist and Hand
    - Metacarpal and carpal percussion, scaphoid load test, trigger finger test, Jersey finger sign, mallet finger test, Finkelstein test, Phalen's test, reverse Phalen's test
- *Back conditions:*
    - The straight leg raise and/or slump can be used prior to massage treatment as "safety checks" for learners. Clients should be referred if the tests are positive.

## Provide Sports Massage Techniques to Prevent and Manage Injury – H/506/7502

Best practice should be encouraged by giving students the opportunity to work on real clients. However, as this is not always possible and may create barriers to assessment, students may carry out treatments on peers.

Learners must provide sports massage to a **minimum of 5 different clients.**

### Observations

Learners must be observed summatively a minimum of five times to cover 'Be able to apply soft tissue techniques in sports massage treatments'.

### Understand the principles of soft tissue techniques used in sports massage

***Soft tissue techniques***

- Soft tissue release (Active and Passive)
- Connective tissue
- Corrective frictions (transverse)
- Trigger points
- Muscle energy techniques (performed on muscle groups)

**Treatment Modalities to support Soft Tissue Repair – K/506/7503**

- Cryotherapy, heat, active and passive stretching, other research based modalities